



Value  
**untangled**

Accelerating radical  
growth through  
interoperability

From insights to action, the path to extraordinary value starts here.

**accenture**

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# Agility in times **of uncertainty**



In an unpredictable world, the ability to quickly adapt to new circumstances, adopt new technologies and otherwise remain nimble allows companies to thrive. With the integration of these technologies, people and processes, companies can untangle value from chaos and accelerate growth.

To learn more about the **value of agility**, we surveyed 4,000+ C-suite respondents from mid- to large companies. We found that in the last two years alone, one in two have had to transform multiple parts of their business at the same time or execute a single large transformation much faster than ever before. We call this compressed transformation (Figure 1).

The question is:  
**How did they do it?**

### Figure 1 Uncertainty and compressed transformation

*In the last two years, one in two companies have had to transform multiple parts of their business at the same time or execute a single large transformation much faster than ever before.*

During the COVID-19 crisis, i.e., the last 2 years, my organization has (agree + strongly agree)

#### Speed

49%

Adopted tech and transformed business much faster than ever before

#### Scope

40%

Transformed multiple parts of the business at the same time

#### Scale

38%

Handled exponential growth in online business/hybrid work arrangements

N = 4053

Note: The percentages represent aggregate of respondents selecting "Agree" and "Strongly Agree"



# Interoperability: The great unifier

## Interoperability Defined

Interoperability is when enterprise applications can easily interact with each other and exchange data.

A seamless user experience across applications creates a single source of data truth that aligns everyone to common goals, leading to better decision making, human connections and insight generation.

We found that companies with this kind of agility have one thing in common: high interoperability, or the ability to make enterprise applications work in conjunction with each other. In fact, companies with high interoperability are 11% more likely to sustain compressed transformations.

Why? Because interoperability integrates critical business applications, turning tangled inputs into a single source of data truth. This leaves organizations better equipped to pivot quickly and take advantage of new opportunities.

And with that agility comes growth. In fact, **we found that companies with high interoperability grew revenue 6X faster than their peers with low interoperability (Figure 2) and are set to unlock an additional five percentage points in annual revenue growth.** It comes as no surprise, then, that winning companies keep interoperability top of mind for the entire C-suite—not just the CTO or CIO.

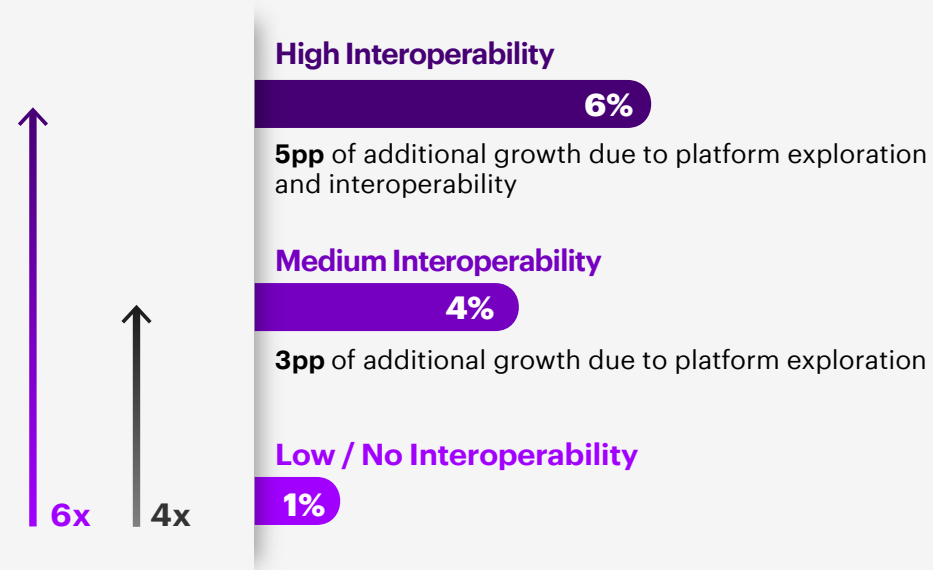
CXOs need to understand that integrated enterprise applications can enable businesses to move from siloed technology and fragmented data to connected solutions, agility and resiliency. Integration creates true business transformation, creating additional value in meeting customer demands, developing new revenue streams, and competing in the market but requires new methods of thinking and working.



**Figure 2 Interoperability accelerates growth**

Companies with high interoperability unlocked up to five additional percentage points of revenue growth than low/no interoperability companies stuck in the technology status quo.

Average revenue growth last FY (in %)



**Source:** Accenture Research based on Survey data.

**Note:** Additional growth rates due to increased platform exploration and seamless interoperability are estimates based on an econometric model such as Revenue Growth = A x medium interoperability + B x high interoperability + C controls + error, in which the baseline is the low/no interoperability group. Estimates include a variety of firm-specific controls including industry, country, size, technology spending and an interaction term between industry and country. A variety of robustness checks have been performed (i.e., scaling revenue growth by industry averages, by previous growth rates and the results holds. Survey sample= 4,053 firms in 19 industries and 23 countries. Revenue growth percentages have been rounded off to the nearest whole number.

**Last FY** implies the latest annual company financials reported before February 2022.

That’s not all. Companies with high interoperability—especially those that manufacture, source or sell physical goods—also outpace companies with low/no interoperability in profitability, resiliency and other value-creation measures critical to business. For example, we found that companies with high interoperability were:

**More efficient:**

12 percentage points better at improving their supply chain and operations

**More successful at CX:**

16 percentage points better at reinventing customer experience

**More productive:**

12 percentage points more likely to be successful when improving employee productivity is a priority

**More sustainable:**

4 percentage points more likely to be successful at embracing sustainable business practices



# How does interoperability create such far-reaching value?

At its core, interoperability connects technology, people and processes. It does so by creating a common language across critical applications and systems, enabling a deeper understanding of data without the cost and effort of building a data lake. When data silos are removed, functional silos can begin to collaborate. This inherent synergy reduces duplicative efforts, reveals hidden bottlenecks and builds better human connections, improving the following value drivers:

## 01. Transparency:

Interoperability unites data silos, allowing for greater data visibility throughout the enterprise and better decision making. Deploying process mining tools on interoperable business applications enables enterprises to improve visibility across all business processes.

## 02. Agility:

Interoperability better manages dependencies, providing the agility to transform multiple business functions fast and at the same time. It improves enablement of the right IT infrastructure needed for successful transformations by 13 percentage points.

## 03. Productivity:

Interoperability eliminates the chance that multiple people work on the same task and streamlines data sharing. It also reduces the time spent toggling between applications, something that can account for nearly two hours of every employee's workday. Low code/no code applications can be deployed across interoperable systems to drive productivity.

## 04. Experience:

Interoperability enables holistic, real-time access to customer data stored across systems, which allows a laser focus on customer needs. Highly interoperable companies are 15% more likely to be able to improve customer experience (CX) when it's a priority.

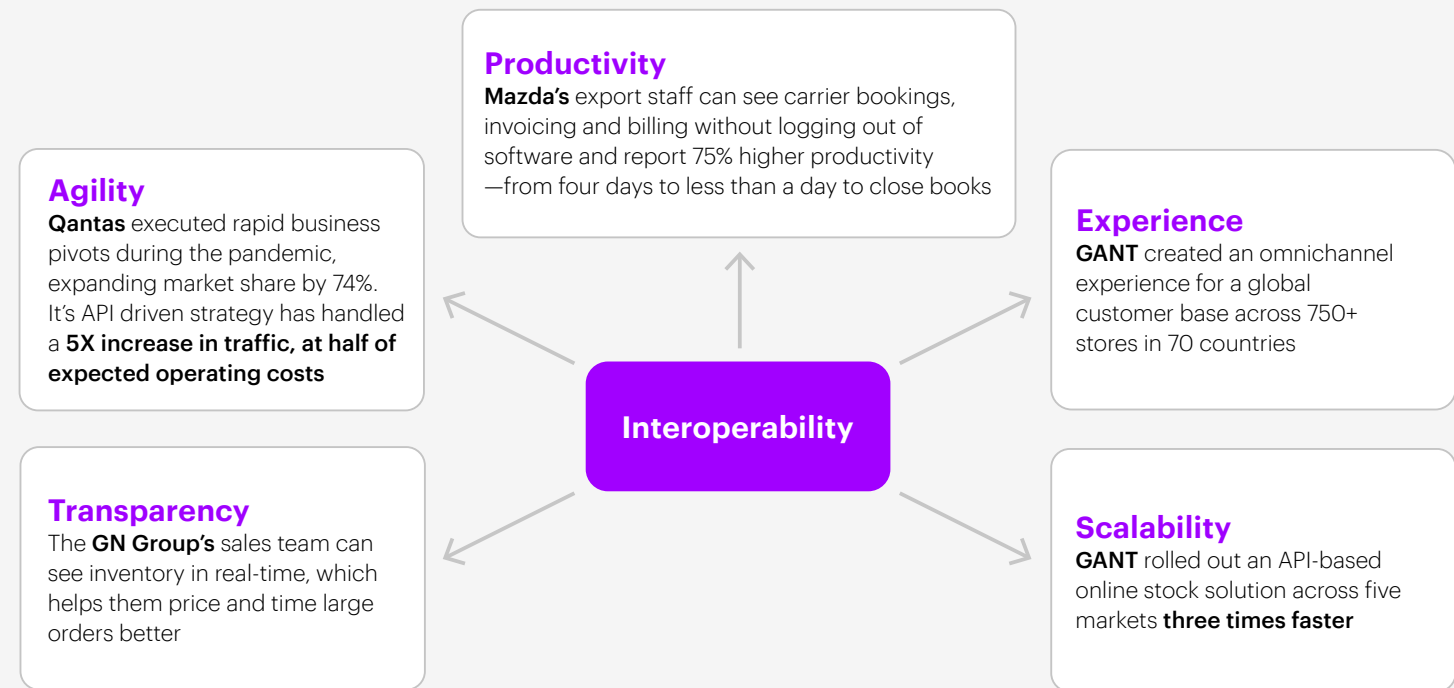
## 05. Scalability:

Interoperability creates in-context connections, ensuring that cutting-edge innovation reaches across the business faster—which increases the ROI by 7%.



**Figure 3** Real-world organizations untangling value via interoperability

By connecting technology, people and processes, interoperability extracts value that's often in sight, but tangled up in the organization.



**Source:**

**GN Group:** GN Group future-proofs its fast-growing operations with Microsoft Dynamics 365: <https://customers.microsoft.com/en-us/story/1354283595134173825-gn-group-consumer-goods-dynamics-365>

**Qantas:** Qantas APIs take flight with WSO2 technology: <https://wso2.com/about/customers/qantas/>

**GANT:** GANT creates an omnichannel experience for a global customer base <https://www.mulesoft.com/case-studies/api/gant>

**Mazda:** Mazda Motor Logistics speeds visibility across supply chain: <https://www.oracle.com/customers/mazda/>





# Interoperability is now in reach

The concept of interoperability isn't new, but the ability to manifest it is. This is due to three technology changes that make it easier for organizations to configure and reconfigure applications as needed without overhauling their digital core:

## 1. Ubiquity of cloud:

Many organizations have already moved to the cloud, giving them a common data layer that provides a single source of truth.

## 2. Improved application design:

Modern applications are designed to share data, they have simplified interfaces and support additional capabilities.

## 3. Low-cost applications:

The large number of specialized applications on the market has reduced the cost.

Our research finds that only one in three companies is capitalizing on these technological advances to untangle the value trapped within their organization. These companies are racing past their competitors because they make high interoperability central to their overall business and technology strategy.





# GN Group hits play on enterprise interoperability

One company that truly understands the value of high interoperability is GN Group, a global audio solution manufacturer. Even before [The New York Times](#) declared its Jabra headset as the best on the market in spring 2021, GN Group braced for a demand surge by integrating its business applications under a unified strategy.

Sales had jumped 82% in the first quarter of 2021 on the heels of a 42% rise in 2020 when COVID-19 influenced millions to buy headsets for remote school and work. Company leaders knew this need would only grow with fast-changing consumer behavior—and that GN Group’s people and technology would play a critical role in meeting the demand.<sup>1</sup> Given the urgency, this transformation needed to happen quickly.

GN group turned to Microsoft, an enterprise applications partner. Using Microsoft’s cloud-

based enterprise solutions, the company connected multiple functional applications—like supply chain operations and finance—to gain additional insights. This enabled parallel, rapid transformation in multiple business areas.

Employees across the organization now make decisions based on a single source of trusted data, and in real time. For example, if the sales team gets a large order, they can quickly check if procurement has the available components and generate accurate timing estimates and



pricing on the spot. Vendors and suppliers—typically late to learn about new demand—are also in the loop and can now make their own informed inventory decisions.

“When we hold strategic meetings as a management team, we now have one set of numbers and we don’t have to wonder whether the figures are correct,”

**says Anders Bundgaard Jensen,  
Head of Business Finance at GN Group.**



# Interoperability's **long-term value and low cost**

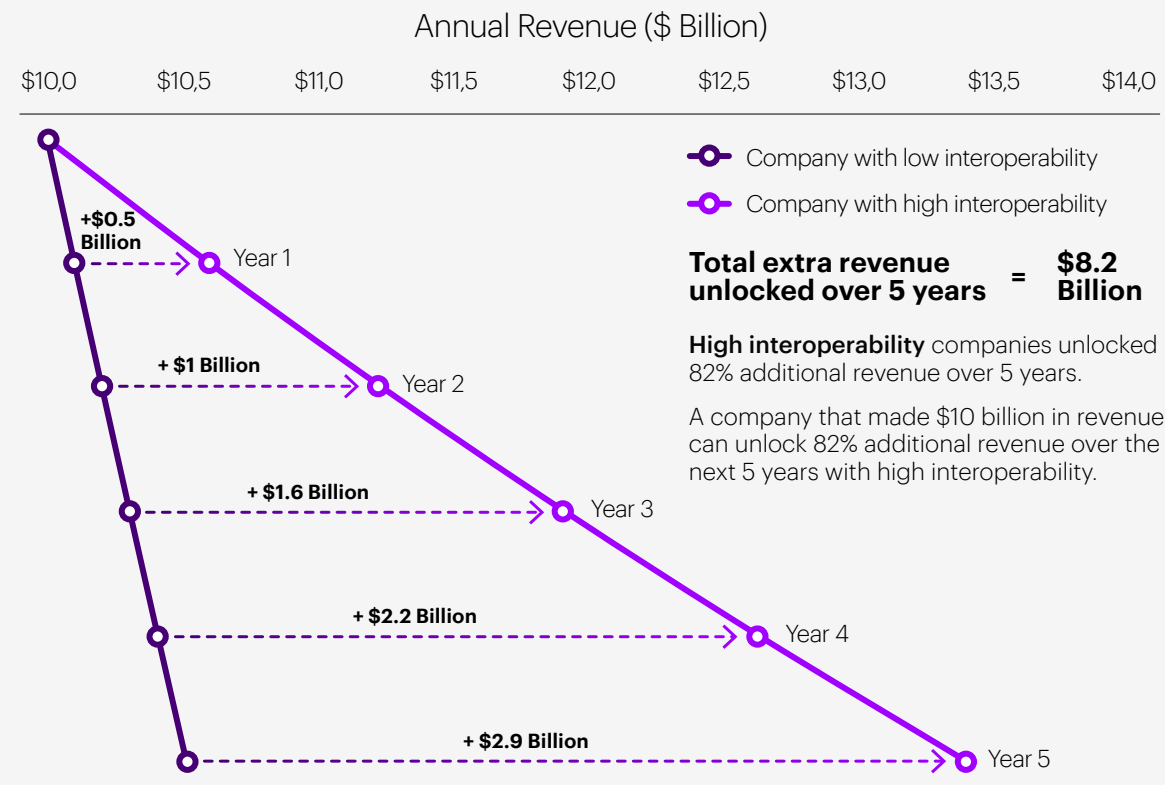


We already know that companies with high interoperability can unlock an additional five percentage points in annual revenue growth.

But this is also a significant long-term advantage: If two similar companies start with \$10 billion in revenue today, the company with high interoperability would stand to make \$8 billion more than the company with low interoperability over the next five years (Figure 4).

**Figure 4** Interoperability accelerates growth

Five percentage points of additional revenue growth delivers an extra \$8 billion over a period of five years.



**Note:** Calculation of annual revenue for next five years is done basis 5% additional growth premium achieved due to higher interoperability. Both companies start at \$10 billion in revenue, with company with low interoperability growing at 1% per annum and company with high interoperability growing at 6% per annum.



## So how much does this all cost? The answer: Interoperability won't break the bank.

Our research shows that leading companies are able to achieve high interoperability with just 2-4% higher IT and functional budgets directed at applications, while handling as many (if not more) diverse applications within their IT stack.



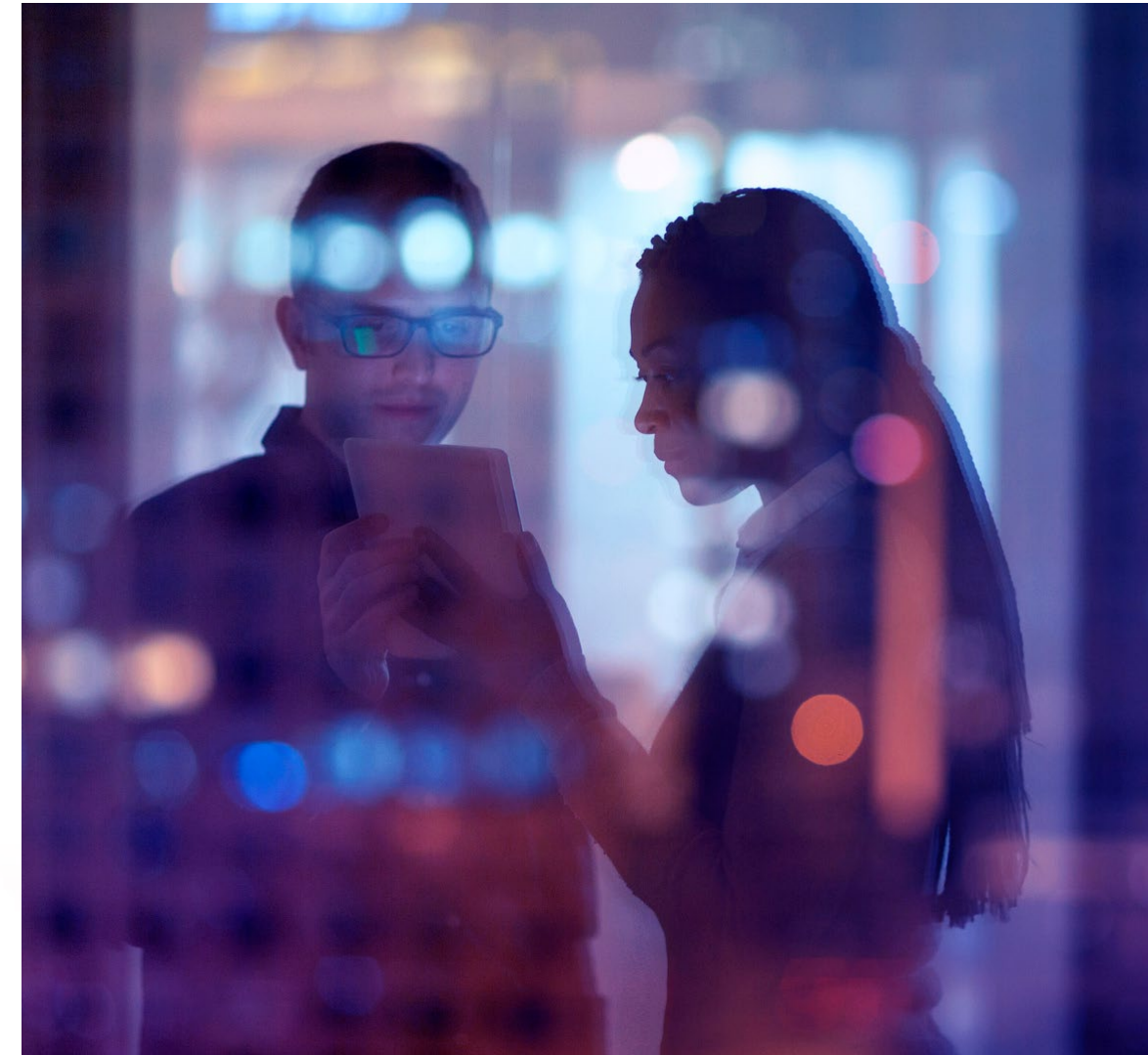


## Interoperability is the common denominator to success across industries

Interoperability is egalitarian—it allows all kinds of businesses to outperform their peers. In fact, our research revealed that the value of interoperability is consistent across industries and economic cycles. (Figure 5).

Take, for example, Life Sciences, an industry that grew rapidly during the pandemic on the back of global demand for vaccinations. Companies with high interoperability in this industry grew revenue by almost 10%. The ones with low/no interoperability grew revenue at 5%, on average.

On the other end, the Travel industry struggled during the pandemic. The industry's low/no interoperability companies saw revenue decline by 4% on average. The companies with high interoperability who could quickly pivot their business models and execute rapid transformations thrived, growing revenue at 2%.



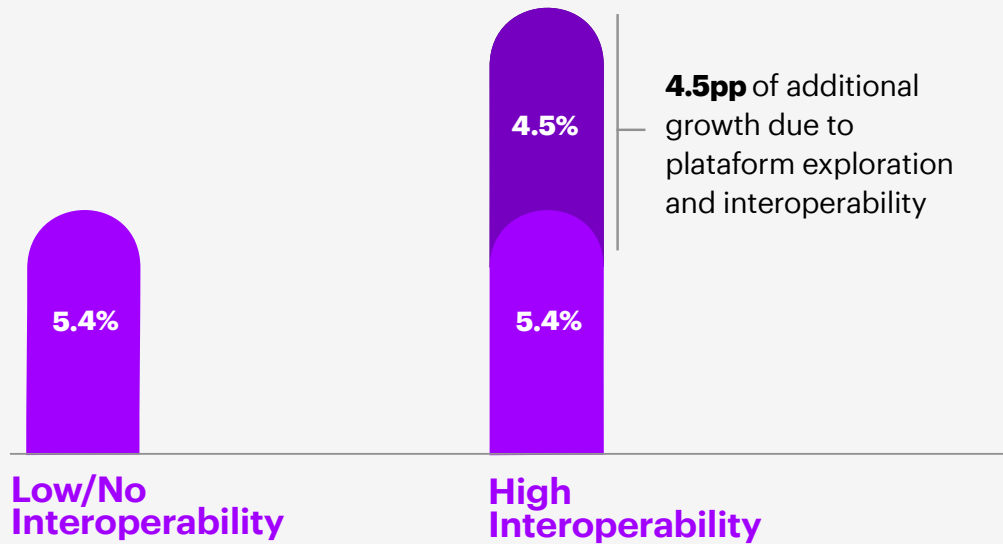


### Figure 5 Outperforming across industries

Companies across industries—from Life Sciences to Travel—create value, in good times and bad, when they prioritize interoperability.

#### Life Sciences

Average revenue growth last FY (in%)

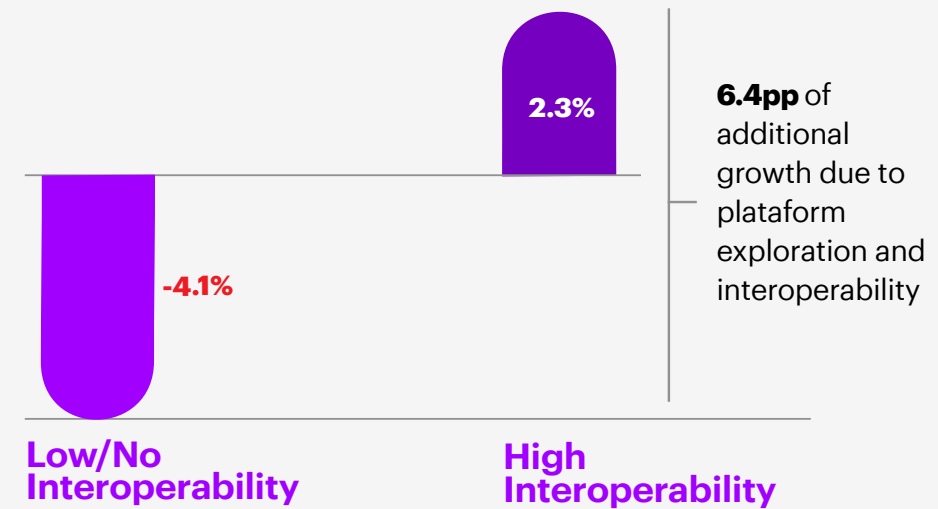


N=244\*

\*Note: Data for Life Sciences vertical excludes outliers – companies that grew applications without increasing vendors (6 in total). Last FY implies the latest annual company financials reported before February 2022.

#### Travel

Average revenue growth last FY (in %)



N=250

Note: Last FY implies the latest annual company financials reported before February 2022.



## In depth

# Qantas flies above the turbulence with operational interoperability

Qantas<sup>2</sup>, the flag carrier of Australia, is one of the few airlines that thrived despite the pandemic. In contrast to the global airline sector, which saw more than \$174 billion in losses by the end of 2021, Qantas became more financially secure and witnessed a 120% stock price surge.

How? The airline quickly pivoted to domestic travel when Australia shut down its borders in March 2020 and started subsidizing 800,000 half-priced airfares to support tourism. Qantas orchestrated its biggest network expansion in a decade, adding 45 domestic routes. What's more, after noticing a competitor significantly scaling back operations, Qantas managed to win over many of its frequent fliers—expanding its own market share to 74%.

Executing this compressed transformation was possible due to Qantas's three-year recovery plan. Launched in 2019, it lays out targeted investments in digital and data capabilities centered on creating a better customer experience through personalization, driving new operational efficiencies and broadening the group's earnings base beyond the core aviation business<sup>3</sup>.

The airline operates in a diverse software application environment. It has chosen SAP Qualtrics<sup>4</sup> to elevate its customer and employee experiences with newer technologies like AI-based conversation surveys.

It has also partnered with Workday<sup>5</sup> to bring its enterprise applications into the cloud and create a single system for managing leaves, payroll, recruitment, training, rewards and recognition.





And like other companies with high interoperability, it also focuses on integration and interoperability across its applications and data. Using the WSO2 API Management platform<sup>6</sup>, the company has undergone a technology revamp to integrate applications and data with agility. In just 12 months, the company saw a tenfold increase in the number of connections (APIs) and 5X growth in the volume of communication that flows through these connections (managed API traffic), all at half of its legacy operating costs.



### In depth

## Mazda fuels productivity with functional interoperability

Japanese automaker Mazda<sup>7</sup> illustrates how functional interoperability can transform organizations. The company's Motor Logistics division—which handles distribution of Mazda cars and parts throughout Europe—had an issue: its warehouse wasn't talking to its transportation unit.

Mazda's legacy warehouse management system lacked a transportation management module, leaving Mazda without visibility into its product shipments. Unable to ensure on-time delivery, Mazda risked leaving customers unsatisfied. Competitors could also threaten market share with non-Mazda-certified parts.

The company relied on an integrated suite of Oracle applications to manage orders and inventory, warehouses and transportation. Now, Mazda's employees can easily follow products from order to delivery.

Most importantly, this strategy has changed how functional employees work. Mazda's export staff can see carrier bookings, invoicing and billing without logging out of software and report 75% higher productivity—from taking four days to close the previous month's books to less than a day. What's more, reducing manual labor has allowed Mazda to redirect resources to customer service.



# Barriers to **interoperability**



Today's business and technology landscape can make reaching high interoperability a challenge precisely because it can become a tangle very quickly.

Most large enterprises have more than 500 applications, and eight out of 10 say they plan to buy more from multiple vendors in the next two years. At the same time, 66% say that the number of applications and their associated technical complexities are a barrier to reaching interoperability. The longer these organizations wait to make themselves interoperable, the more difficult it becomes to retrofit interoperability on an ever-growing application stack.

What's driving this difficult situation? First, enterprises have more choices today due to the large number of cloud-based applications available. In the last decade, marketing activity has moved online and onto social media—and the number of enterprise technology providers that cater to marketing has grown by...

**53x<sup>8</sup>**



”

Financial tools are always provided by many vendors. We want to work with the best for key, bigger ERP applications and different applications have different pros and cons. So, you can't actually just rely on one vendor to do everything.

The CIO of a **Southeast Asian Health Services Company**



The second key factor is that more voices are involved in technology decision making. IDC, an industry analyst firm, believes that as many as 20 IT and line-of-business employees may be involved in technology decision-making processes today.<sup>9</sup>

But having more choices and more voices can be a great thing. It allows organizations to choose tech with the right features for specific processes and differentiate across functions where it matters. For example, fraud detection applications in Banking need to be much more sophisticated than those in Food Retail. And in Healthcare, applications need the strongest data and privacy measures given the sensitive data they handle. Similarly, Consumer Goods companies need applications to enable near real-time social media monitoring so that they can launch new products and adjust current ones as trends quickly change or emerge.

# 60%

of respondents in our study are held back from improving interoperability because they struggle to align their application strategy with overall business goals. Another 57% cite lack of buy-in from senior leadership; 44% lack a clear ROI or business case; and 34% believe interoperability is simply too expensive.



Companies with high interoperability also face these challenges. But what sets them apart is their ability to cope with obstacles by finding alignment across the business, acting early and making difficult decisions as needed. They build and reinforce technology integration with purposeful collaboration—intrinsic to employees' work life. **And most importantly, they back up their diverse application stacks with the right business strategy. One that is conscious of the organization's full universe of applications and vendor selection style and recognizes the limitations of the IT team.**

Consider these two successful energy companies, each with high interoperability across their applications, but with different approaches tailored to their application buying preferences.





### ENGIE excels with a multi-vendor strategy

ENGIE, a French multinational utility, leverages multiple applications from different providers to run its business, bring together 170,000 employees across 70 countries and disseminate knowledge of customer needs.

#### The company relies on:

- Salesforce for customer relationships<sup>10</sup>
- Oracle for talent management<sup>11</sup>
- Microsoft for employee experience<sup>12</sup>
- SAP Concur for time and expenses<sup>13</sup>
- SAP S/4 HANA<sup>14</sup> on AWS Cloud for global finance

ENGIE is deeply aware of its multi-provider application strategy and invests in Dell Boomi,<sup>15</sup> an integration provider that connects its diverse stack together.

**This works well for ENGIE: It has seen a 70% growth in sales opportunities in the past couple of years, despite the pandemic.**



### RetiPiù S.R.L. delivers with an SAP-centric strategy

In contrast, RetiPiù S.R.L.,<sup>16</sup> an Italian energy company, relies on SAP for most of its applications. Its relatively homogenous application stack builds native interoperability among its applications and allows it to transform multiple parts of the business at the same time.

RetiPiù S.R.L. uses SAP S/4HANA and SAP Intelligent Asset Management applications to improve customer experiences. This has unified its intelligent asset maintenance system, enabling better resource management and real-time mobile access. Field engineers can now remotely resolve issues and the company has achieved a 20% improvement in capitalization.

The utility also uses the SAP Enterprise Asset Management solution to create digital twins for its equipment and activate predictive models. And it uses SAP IoT solutions to gather detailed sensor data from network equipment that it shares via mobile applications with field technicians.<sup>17</sup>

The company now receives information and can update work order statuses in real time.

**The result? A 100% increase in the pieces of equipment it can manage on the network—from 12,000 to 24,000—and a 50% reduction in maintenance cost.**



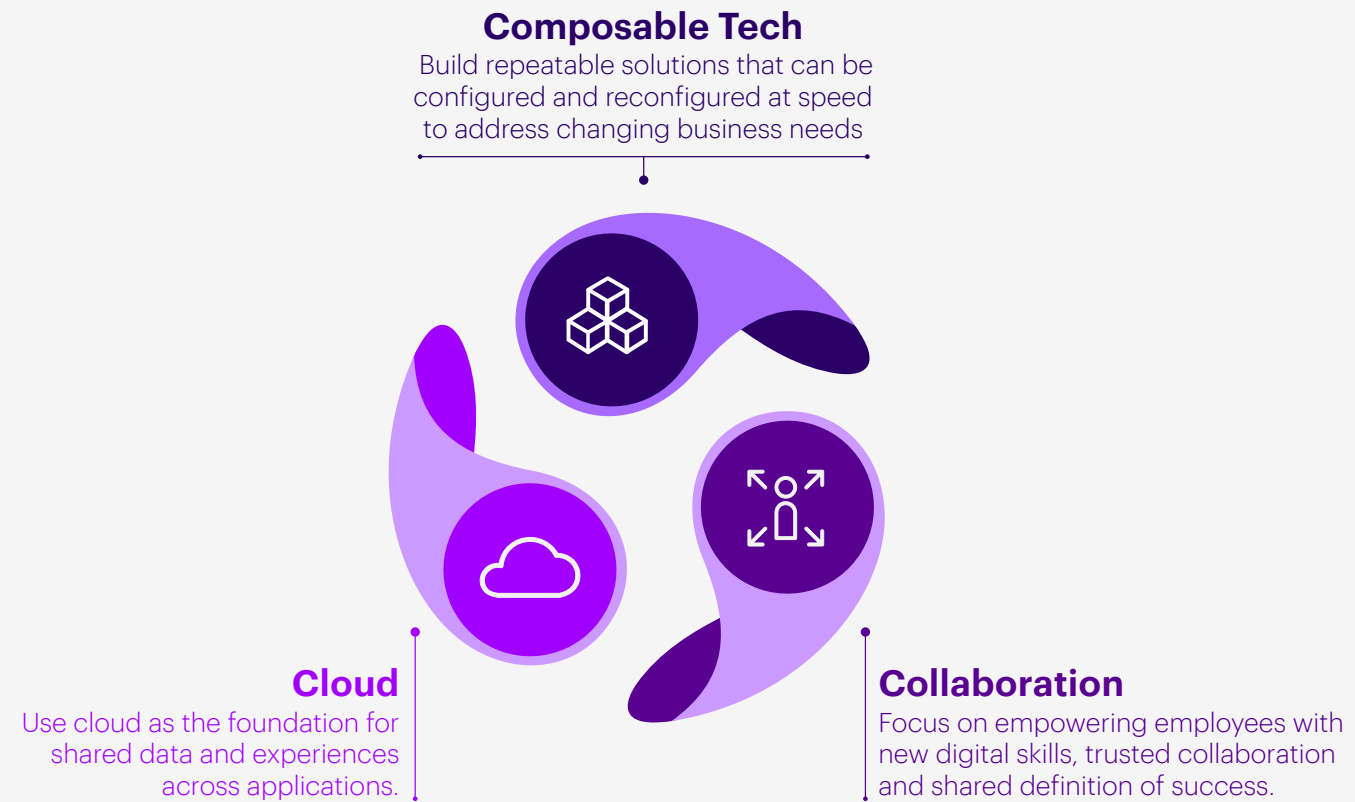


# How to improve interoperability **and thrive in uncertainty**

Our research uncovered the best practices and common pitfalls C-suite respondents faced on their way to high interoperability, as well as what enabled them to compress their transformation. Here's what we learned.

**Figure 6** How to improve your interoperability

To improve interoperability and compress transformation, companies must leverage the cloud, utilize composable tech and focus on meaningful collaboration.





## 1. Leverage the cloud

Cloud is a fundamental interoperability enabler—and it's now ubiquitous. Organizations can use it to hyperscale computing in their core operations and at the edges. With this ability, organizations can pull and query data across the entire enterprise.

Companies that successfully improve their interoperability start by moving existing applications to the cloud and investing in new, cloud-based enterprise applications (SaaS). But more importantly, **they use the cloud to connect data and experiences across applications, creating one version of truth.** Our research found that nearly 72% of companies with high/medium interoperability adopted public cloud and have already migrated 30% of their data and workloads. Only 60% of low/no interoperability companies have adopted public cloud, a 12% lag.

Companies with high interoperability also use the cloud to change the way they work. They aim to standardize and simplify the processes modern cloud applications manage—enabling real-time insights and creating strategic agility. Interoperability like this breaks down organizational silos and creates a common thread so that change initiatives can flow to different parts of the organization in parallel, and at speed.



”

The more you can be standard,  
the better you are able to  
answer questions and get  
things done... the easier it's  
going to be to do everything.

The CIO of an **American Bank**





The high interoperability group's confidence in the cloud reinforces findings from our 2021 thought leadership piece, the [Cloud Continuum](#): organizations that use cloud beyond migration and infrastructure to reinvent themselves enjoy better cost savings, speed to market, talent retention and sustainability.



## Continue the conversation

The migration of core systems and data is the foundation of a successful cloud journey—but it's just table stakes. Discover what's beyond cloud migration in our report, which reveals four key tenets continuum competitors share to unleash competitiveness on the cloud: [The Cloud Continuum](#)



## 2. Utilize composable tech

Composable tech builds flexibility into the heart of organizations so they can cope with the effects of disruption through faster, better and cheaper transformation. It requires shifting from a technology architecture of static, standalone parts to one of composable pieces.

In practice, this involves using prebuilt, interoperable solutions to swap and plug-and-play smaller application components, creating new applications without wider disruption. These solutions are often curated for specific industries and functions and act as a form of

future proofing—giving organizations the dexterity to quickly adopt the technologies of tomorrow.

However, the greatest benefit of composable tech may be seamless data analysis and sharing. With data flowing between connected applications, companies can easily share information with the entire organization so everyone is on the same page, creating a common purpose and driving better decisions.

## Composable Tech Defined

Composable tech is proven, repeatable solutions that can be configured and reconfigured at speed to address changing business needs. This compresses transformation, setting the stage for rapid value realization.

GANT,<sup>18</sup> a global fashion retailer, wanted to provide a consistent omnichannel experience to keep pace with changing customer preferences. But in the process, GANT spotted a major missed opportunity. Its website showed queried items as out of stock when they might actually be available in a nearby store. This is a negative experience for customers, and ultimately a profit loss for the company. GANT proposed a solution called the “Online Store Stock Check” (OSSC) where customers can search for a particular item online and get a list of nearby stores where the item is available.

Projects like the OSSC were critical to meeting omnichannel expectations and GANT knew there would be similar projects in the future. So, the retailer created a foundational architecture with a system

API (developed with MuleSoft) running the GANT integration center, which governs and drives the transformation through integrations. It allows GANT to remove complexity from various systems and ensure data was available to different lines of business and entirely new channels, like mobile or in-store kiosks. GANT can also reuse assets across projects.

The success of the OSSC was due to API-led connectivity. Because the retail industry is so dynamic, time was of the essence for GANT to implement these omnichannel features. Thanks to its foundational architecture and reusable assets, the retailer rolled out the OSSC solution across five different markets three times faster than if it had used traditional point-to-point integration.



## Continue the conversation

The ability to adapt to changing business needs at speed and scale is key to staying market relevant. Discover how to accelerate the path to value through a data-led transformation enabled with prebuilt, interoperable and repeatable solutions: [Composable Tech](#)



### 3. Focus on meaningful collaboration



Any transformation that doesn't include people is bound to fail—interoperable applications are only one part of the equation. Companies need to also focus on building meaningful collaboration. This is enabled by interoperability and happens when functions and people work together seamlessly towards a common goal.

They can use real-time data, analytics and AI, together with new ways of working, to unlock the value of technology, empower people and achieve better outcomes.



Normally you assume that the technology is the issue, not the case here. Part of it is education of users—without giving them a PhD in IT.

**The Chief Strategy Officer of a logistics organization**





**Companies with high interoperability have an unwavering focus on improving human connections with trust and skills. They continuously invest in pervasive training, empowering IT and non-IT decision makers to make sound application choices. They also build data-sharing mindsets to prevent data hoarding.**

Companies with high interoperability are open to sharing data inside and outside the organization. Decentralized data—where everyone is on the same page—helps companies find harmony. The result is happier, more productive employees who can easily use company data to produce meaningful results, prepare presentations, comply with regulation or simply collaborate. As mentioned above, decentralized data also frees up almost two hours of employees' workdays in productivity alone. For a company that has 10,000 employees, this amounts to a productivity gain of almost 15,000 hours and \$100 million every year.<sup>19</sup>

”

We needed a way to break down data silos between functions. With interoperability, we developed a better working relationship between functions and unlocked the potential of the company to see how different functions impact it. We were very siloed: you toss it over the wall to the other function, you don't even hand it to them. In terms of the hard metrics, I think you're able to see that your finance understands the product line and their data is shared better. Now that we've had that cross-data being shared, we've saved money. I think we can point to a lot of different wins where we've unlocked value by sharing data, information and knowledge. I think once you're there, you're doing well.

An **automotive manufacturer's** CIO



A collaborative culture comes from the top: Our research found that more than one fourth (27%) of executives consider lack of collaboration across business functions as a top challenge caused by low/no interoperability. Leadership can amplify collaboration by drawing up broad use cases for new interoperable applications and challenging employees across functions to solve them as a team—an internal “hackathon” of sorts. Capital One bank regularly hosts collaborative hackathons to improve customer experiences, where external developers, designers and product leaders collaborate with the wider team.<sup>20</sup>

“[Make] sure you have good people that really focus on collaboration, making sure business leaders really feel part of the decision even though they don’t own the decision. And that really is an art.”

**The CIO of a global bank**



## Continue the conversation

Technology has and continues to be an essential accelerator of human connection—helping people learn, collaborate and turn data into meaningful insights. Discover the next step for how to turn these interactions into experiences that create value for both people and business: [From always connected to omni-connected.](#)



# Interoperability: **Value untangled**



Today's companies must anticipate and respond to uncertainty—supply shocks, economic disruptions, competitive threats or new growth opportunities—as it happens, not when the opportunity has passed.

By compressing their transformation from years to months (or even days) and transforming multiple parts of the business simultaneously, companies can overcome obstacles and embrace opportunities.

This only happens when everything is integrated and interoperable, from the diverse technologies that power the business to the employees on the ground.

But building and improving interoperability in a diverse application landscape is easier said than done. Luckily, there are ways to position your company for success: leverage the cloud, utilize composable tech, and finally, focus on meaningful collaboration with decentralized data and capabilities.

**One in three companies** is able to develop this level of agility to untangle the value trapped in their organization, racing past their competitors in growth, efficiency and resiliency. Their secret? Using interoperability as the catalyst for total enterprise reinvention.



# Methodology

# 01. Survey

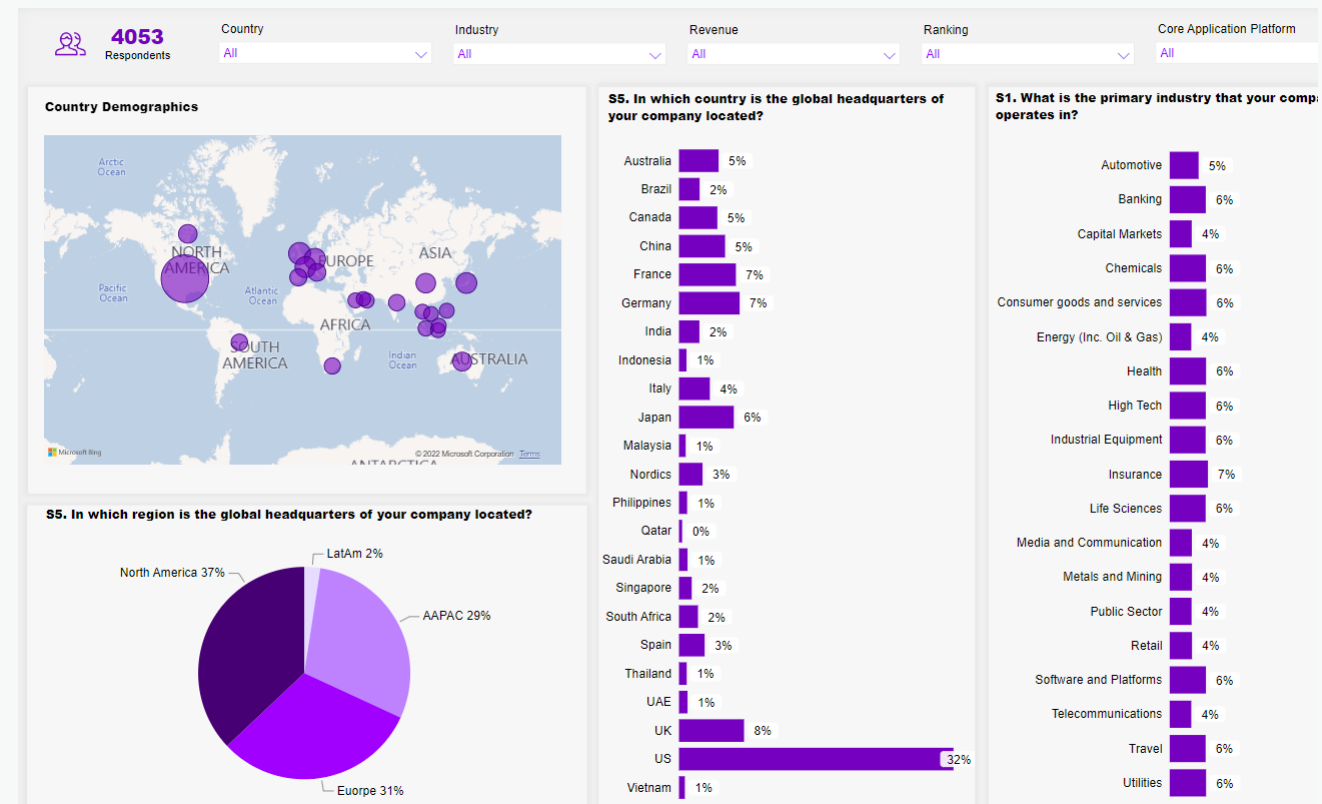
**The Accenture survey, completed in Spring 2022, collected data on:**

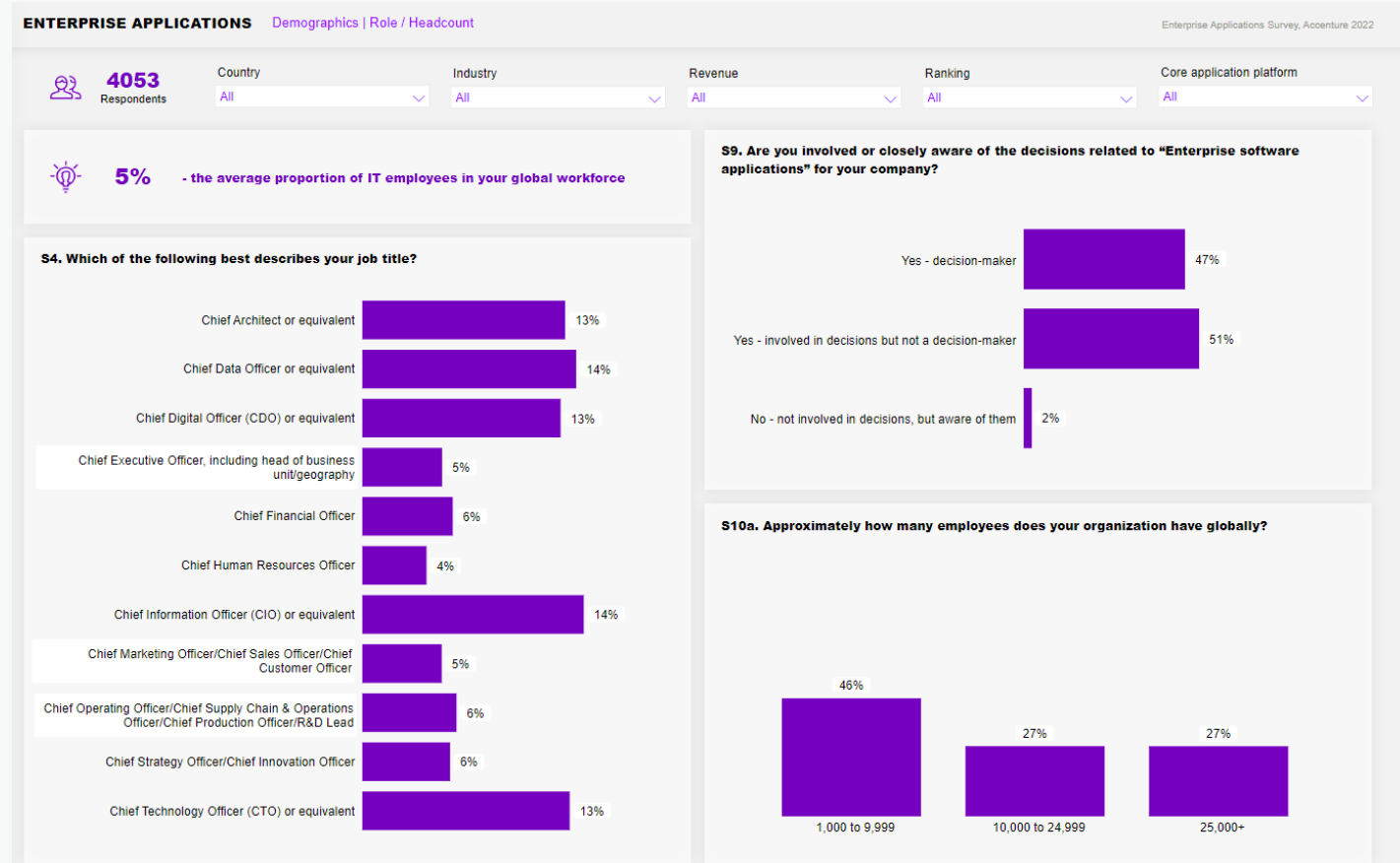
**A)** Technology ecosystem footprint, including the organization’s i) multi-ecosystem journey, strategy, and goals ii) cloud and data footprint iii) state of application integration

**B)** Business landscape, including i) business structure and transformation ii) reskilling iii) customer and employee experience iv) key challenges.

**C)** Financial and operational performance via multiple measures

The graphics summarize the survey demographics.





## Inference Approach

First, we constructed two indexes,

**1) Diversity:** to assess whether a firm had expanded their ecosystem footprint, measured by whether an organization has increased the number of applications used over the last two years, and

**2) Interoperability:** to assess whether a firm had improved their application interoperability, measured by whether their self-reported application interoperability has improved over the last two years.





Using these two indexes as dummy variables, we grouped all 4,053 respondents into three groups. The first group, which had not improved Diversity over the last two years, regardless of their Interoperability score, was named companies with low/no interoperability. The second group, which had improved Diversity but not improved its Interoperability was called companies with medium interoperability. The remaining respondents, who had improved both their Diversity and Interoperability were named high interoperability. Each group had roughly a third of the respondents (~33%, or 1330). In other words, we identified three equal sized groups of companies, one of which was in ecosystem stasis (companies with low/no interoperability), one that was expanding ecosystems but not improving integration (companies with medium

interoperability), and finally, one that was leading in terms of both ecosystem expansion and integration across these ecosystems (companies with high interoperability).

We then investigated how being in each group correlates to measures of performance.

### **Calculation of the Performance Difference**

Using the definitions above, we compared the difference in performance between these three groups—with metrics such as cost savings, revenue growth, employee productivity, and how successful they have been at achieving business goals such as reinventing customer experience and achieving efficiency in supply chain operations.





## 02. Interviews and Studies

We triangulated our findings from the survey's large-scale primary data with 25 in-depth interviews and 40 case studies.

Overall, we collected through secondary research and interviews about 65 case studies focusing on issues organizations are facing on their multi-ecosystem journey and the evolution of organizations toward the multi-ecosystem world.

To analyse the qualitative data (QDA) of the 25 in-depth interviews, we leveraged ATLAS.ti21, a tool that accelerates the QDA by automatically generating deep insights across the interview transcripts.

## 03. Collective Intelligence via an Enterprise Crowdsourcing Platform

To understand the organizational and human implications of multiple ecosystems, we used ThoughtExchange<sup>22</sup>, a qualitative platform designed to bring people together on important topics and gain their collaborative insights. Thirty-five C-suite participants were asked to share their ideas in response to an open-ended question on how their organization increases cross-functional alignment (organizational impact of integration) while preserving the unique features of each function (organizational impact of diversity). Participants shared their

own ideas, rated the thoughts others have provided on a scale of one to five stars, and viewed how the thoughts in the exchange were rated by the group.

Through this process, we aimed to surface the practices that are top-of-mind for C-suite executives as a collaborative effort and enrich our storyline.



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# References

- 1 GN Group future-proofs its fast-growing operations with Microsoft Dynamics 365: <https://customers.microsoft.com/en-us/story/1354283595134173825-gn-group-consumer-goods-dynamics-365>
- 2 One Airline Is Set to Emerge From Covid Stronger Than Ever: <https://www.bloomberg.com/news/articles/2021-06-23/one-airline-is-set-to-emerge-from-covid-mess-stronger-than-ever>
- 3 Digitalisation and big data: <https://www.qantas.com/in/en/qantas-group/looking-ahead/digitalisation-and-big-data.html>
- 4 Qantas opens throttle on 'Voice of the Customer': <https://www.itnews.com.au/news/qantas-opens-throttle-on-voice-of-the-customer-526585>
- 5 Qantas signs on with Oracle and SAP rival Workday in cloud modernisation push: <https://www.afr.com/technology/qantas-signs-on-with-oracle-and-sap-rival-workday-in-cloud-modernisation-push-20160912-gren2t>
- 6 Qantas APIs take flight with WSO2 technology: <https://wso2.com/about/customers/qantas/>
- 7 Mazda Motor Logistics speeds visibility across supply chain: <https://www.oracle.com/customers/mazda/>
- 8 Marketing Technology Landscape 2022: <https://chiefmartec.com/2022/05/marketing-technology-landscape-2022-search-9932-solutions-on-martechmap-com/>
- 9 Digital Innovation Requires Enterprise Application Vendors to Focus on What Matters: <https://blogs.idc.com/2021/01/08/digital-innovation-requires-enterprise-application-vendors-to-focus-on-what-matters/>
- 10 How Engie is building a sustainable future by unifying its data: <https://www.salesforce.com/fr/resources/articles/engie/>
- 11 Oracle Helps ENGIE Manage Its 170,000 Strong Workforce: <https://www.prnewswire.com/news-releases/oracle-helps-engie-manage-its-170-000-strong-workforce-301202203.html>
- 12 ENGIE IT implements a Microsoft "modern workplace" within the ENGIE group <https://customers.microsoft.com/fr-FR/story/1374632648431300901-engie-it-professional-services-microsoft365-fr-france>
- 13 ENGIE makes its digital transformation with SAP Concur <https://news.sap.com/france/2019/06/engie-fait-sa-transformation-digitale-avec-sap-concur/>
- 14 ENGIE Seeks to Digitally Transform and Streamline Financial Processes Using SAP S/4HANA on AWS <https://aws.amazon.com/solutions/case-studies/engie/>
- 15 Boomi integration drives business agility and digital transformation for ENGIE: <https://boomi.com/customer/engie/>
- 16 How Does a Next-Generation ERP Solution Illuminate the Path to Smarter Energy? <https://news.sap.com/2021/12/european-utilities-company-retipiu-makes-maintenance-efficient-transparent-cost-effective/>
- 17 How a European Utilities Company Makes Maintenance More Efficient, Transparent, and Cost-Effective <https://news.sap.com/2021/12/european-utilities-company-retipiu-makes-maintenance-efficient-transparent-cost-effective/>
- 18 GANT creates an omnichannel experience for a global customer base <https://www.mulesoft.com/case-studies/api/gant>
- 19 Based on average wages per hour data from US Bureau of Labor Statistics (<https://www.bls.gov/news.release/empsit.t19.htm>). Calculation: Productivity gain with interoperability x Average hours worked per day per employee (8 hrs) x No. of employees (10,000) x No. of working days in a year (260) x Average wages per hour (\$32 as of June 2022 per US Bureau of Labor Statistics)
- 20 How Hackathons Support Lifelong Learning (<https://www.capitalone.com/tech/software-engineering/how-hackathons-support-lifelong-learning-and-innovation/>)
- 21 ATLAS.ti: <https://atlasti.com/>
- 22 ThoughtExchange: <https://thoughtexchange.com/about/>

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